## **Abstract**

A servo system includes a first member and a second member that is positionable relative to the first member. A position error signal causes the second member to be positioned at a desired location relative to the first member. The position error signal includes a position error due to a disturbance in the servo system, and the position error is reduced by attenuation of a disturbance signal as a non-linear function of the amplitude of the disturbance signal.